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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,898	10/19/2001	Tominari Nomura	Q66830	7310

7590 03/23/2006

SUGHRUE, MION, ZINN, MACPEAK & SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3202

EXAMINER

NGUYEN, SIMON

ART UNIT PAPER NUMBER

2618

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/981,898	<b>Applicant(s)</b> NOMURA ET AL.	
	<b>Examiner</b> SIMON D. NGUYEN	<b>Art Unit</b> 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-16 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 21-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (Reg. Number H1,897) in view of Abdel-Malek et al. (2005/0171661 A1).

Regarding claim 1, Fletcher discloses a centralized maintenance management for a portable telephone system via an internet (abstract, figs.1-3, column 11 lines 1-12), comprising: accessing an information providing server of maintenance management center from a maintenance terminal (operator) performing fault diagnosis and recovery operations of the telephone system (fig.3, column 15 line 66 to column 16 line 25, column 17 lines 4-29). However, Fletcher does not specifically disclose the step of searching a database server in which fault data and a diagnosis dictionary are stored through the server to acquire fault diagnosis and fault recovery.

Abdel-Malek discloses a diagnosis and repair system and method for maintenance and repair a machine, wherein the machine used in telecommunication or the machine such as a locomotive (paragraph 5) in which a technician use a portable terminal remotely accesses a repair document in a database of a diagnostic service

center (fig.1, abstract, paragraphs 10-12, 26-27). Therefore, it would have been obvious to one skilled in the art to apply the technique of diagnosis a machine in the telecommunication as taught by Abdel-Malek in Fletcher in order to provide significant productivity gains and cost savings to the communication system.

Regarding claim 8, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 17, this claim is rejected for the same reason as set forth in claim 1, wherein Fletcher further discloses a plurality of portable telephones connected to a fixed telephone network (fig.1).

Regarding claim 3, Abdel-Malek further discloses diagnosis file stored in the database server (paragraphs 26-27, 31-32).

Regarding claims 2, 9-11, 18-20, in the modified Fletcher, Abdel-Malek further discloses repair experts for supporting the diagnostic operation when problems or issues arise that he is incapable of handling (paragraphs 27-28), which means that Abdel-Malek teaches other technicians or engineers support in repairing and diagnosing, and upon completion of the repair, the technician generates a report, and the report is sent to the service center, where it will be included with the repair history (paragraphs 26-28, 34-38), which means the technician transmits a fault recovery data to the server and the server will update the diagnostic data when the repair is completed. Therefore, it would have been obvious to one skilled in the art to have Fletcher, modified Abdel-Malek in order to ensure a quick and accurate diagnosis and repair.

Regarding claims 4-6, in the modified Fletcher, Abdel-Malek discloses collecting and recording information in the database server including issuing of a repair request, completion report, process situation report, maintenance schedule (paragraphs 27, 34-39, 63, 68, 63,68).

Regarding claim 7, in the modified Fletcher, Abdel-Malek discloses an inventory management-calculating inventory based on maintenance service (paragraphs 44-45).

***Allowable Subject Matter***

3. Claims 21-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 21, the prior art of record fails to teach the step of registering a repair return date into the repair request data of the database server.

Regarding claims 22-26, these claims are objected as being dependent upon dependent claims that have been objected.

4. Claims 12-16 are allowed.

Regarding claim 12, the prior art of record fails to teach the step of registering a repair return date into the repair request data of the database server and inputting a printing instruction of a repair tag card to be applied to the repair article and sending to the repair center.

Regarding claims 15, the prior art of record fails to teach the step of performing fault occurrence prediction and determining a failure ratio, calculating required quantities of spare apparatus and panels and storing the required quantities as predictive maintenance schedule data.

Regarding claim 16, the prior art of record does not specifically disclose the step of delivering apparatus and panels corresponding to a shortage into a distribution center.

Regarding claim 13-14, these claims are allowed as being dependent upon independent claim that has been allowed.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-11, 17-20 have been considered but are moot in view of the new ground(s) of rejection.

In Remarks filed on 2/17/05, the Applicant pointed out that the last Office Action should be a non-final rejection because the Examiner using a new art of record to reject the claims. As the result of this argument, this Office Action is a non-final.

The new art issued to Abdel-Malek teaches method and apparatus for diagnosing and repairing system, wherein the diagnosing and repairing system used for diagnosis and repair machines in telecommunications, or other industries such as locomotive, aerospace, power generator (paragraph 5), in which a technician having a mobile device accesses, searches the repair recommendations, individual repair steps, diagnostic tasks, stored in the database of the service center that may be necessary to

troubleshoot the problem, and downloads the maintenance and repair information to the mobile device, wherein the mobile device uses the information to troubleshoot the problem. Since the teachings of Fletcher and Abdel-Malek applied to telecommunications, the combination is reasonable.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
600 Dulany, Alexandria, VA 22314

Or faxed to:

(703) 872-9314, (for formal communications intended for entry)

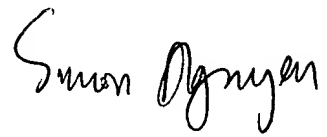
Hand-delivered response should be brought to Knox building,  
501 Dulany, Alexandria, VA.

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Simon Nguyen

March 7, 2006

A handwritten signature in black ink that reads "Simon Nguyen". The signature is written in a cursive style with a large, stylized "S" and "N".

**SIMON NGUYEN  
PRIMARY EXAMINER**